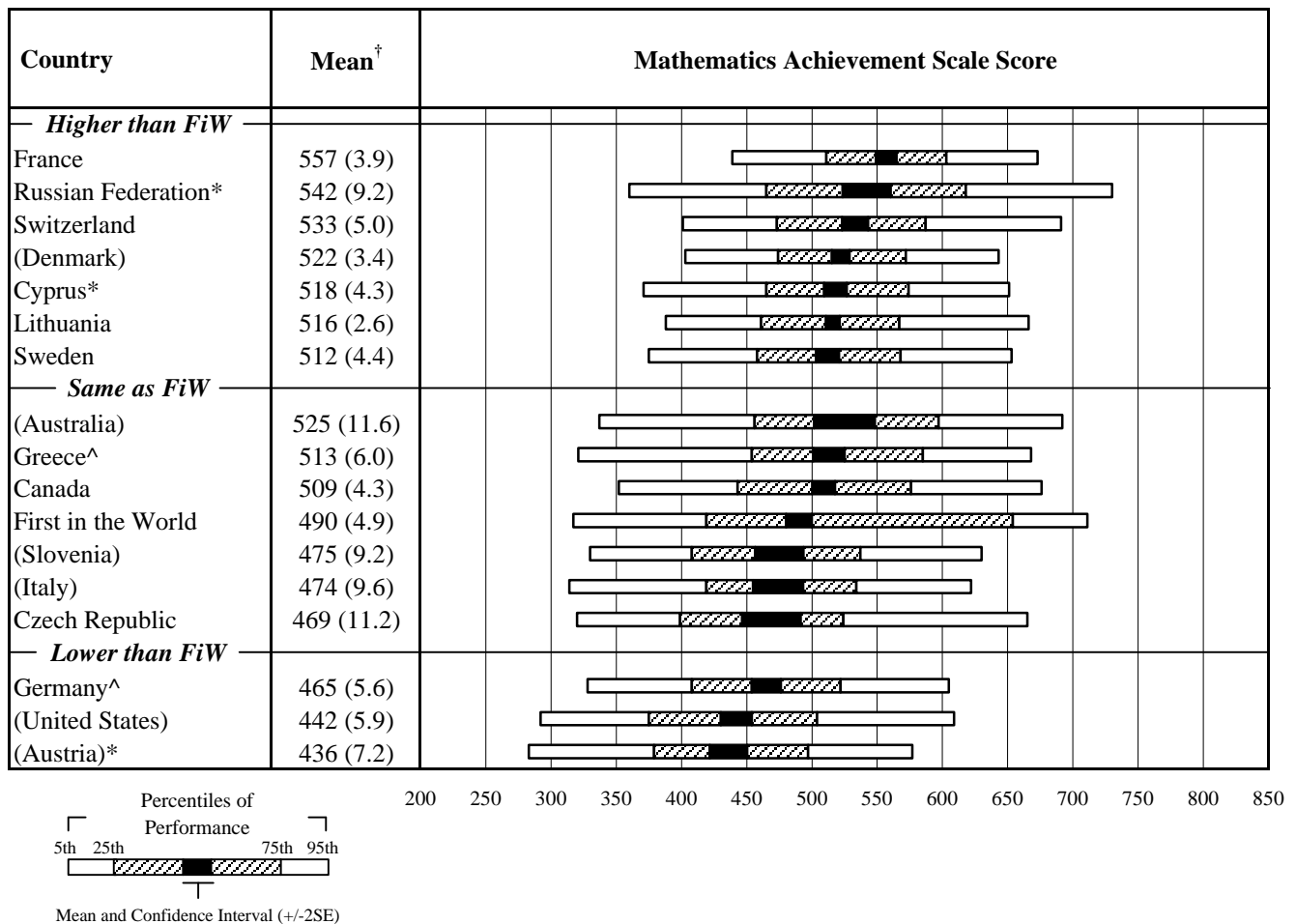


## Exhibit B-9: Distributions of Advanced Mathematics Achievement in the Twelfth Grade<sup>1</sup>



SOURCE: Student Achievement Data, NCREL; tables 5.1, E.4, and E.9 and figure B.5 in Mullis, I.V.S., *et al.* (1998). *Mathematics and Science Achievement in the Final Year of Secondary School: IEA's Third International Mathematics and Science Study*. Chestnut Hill, MA: Center for the Study of Testing, Evaluation, and Educational Policy, Boston College.

<sup>1</sup> Approximately 19 percent of the international school leaving age cohort, 14 percent of the U.S. cohort, and 65 percent of the FiW cohort were covered by the TIMSS sample for this assessment.

\* Nations in which more than 10 percent of the population was excluded from testing.

<sup>^</sup> Nations in which a participation rate of 75 percent of the schools and students combined was achieved only after replacements for refusals were substituted.

<sup>†</sup> Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

NOTE: Nations not meeting international guidelines are shown in parentheses.